

LAB Group Work Separating Mixtures**Question** How can you separate mixtures?**Procedure**

1. Mix iron filings and sand in a bowl.
2. Put the magnet in the plastic bag. Close the bag. Hold the magnet in the mixture of iron filings and sand. What do you observe?

3. Now put 1 spoonful of salt into the cup of water. Stir until the salt has dissolved. What kind of mixture did you make?

4. Pour the salt water into a shallow pan. Place the pan in a warm, sunny place. Leave it there until the water has evaporated. (This may take a few days.) What do you observe?

Safety Note: Wash your hands after pouring. Wipe up any spills.

Analysis

1. Draw a conclusion about how you can separate a mixture that contains iron.

2. What is one way you can separate the parts of a solution?

3. Suppose you made a mixture of sand and water. **Hypothesize** how you could separate the parts.

Materials

- bowl
- cup half-filled with water
- sand
- table salt
- iron filings
- plastic spoon
- magnet
- shallow pan
- small zip-top plastic bag